



ePM News

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Upcoming Training Events

By Dan Avila and Griff Campbell
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Once again, the ePM Team is excited to announce the following training events (please mark your calendars accordingly):

ePM Multiple Network Training

This training will cover the New Multiple Networks on ePM and the changes to the Project Management Screens.

It is highly recommended that all Project Managers, and any other employees who set up projects on ePM attend this training. The following dates and times have been scheduled in each region:

Venue	Date & Time	Location
Region 1	Nov. 17, 9 am to noon	Large Conf. Rm
Region 2	Dec. 05, 9 am to noon	Hurley Conf Rm
Region 3	Nov 28, 1 to 4 pm	Conf Rm A,B,C
Region 4	Nov 30, 9:30 to 12:30	Large Conf. Rm

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Project Management Training Seminar

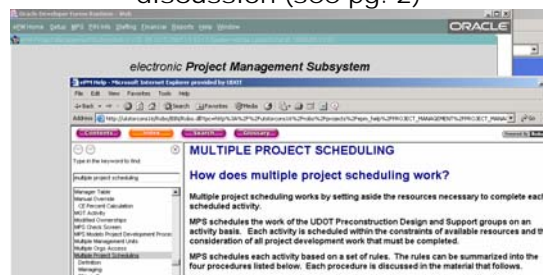
The first two rounds of Project Management Seminar instruction took place in Salt Lake City in June 2005. Over fifty UDOT employees attended and completed the course; their feedback providing encouragement to continue offering this class in the near future. As previously done, a wide audience will be targeted for future sessions, including Project and Functional Managers and other support personnel with close ties to project management. If you are interested in obtaining more information about this course, or would like to have your name included in the selection group for upcoming sessions, seek approval from your supervisor and contact Jennifer Crane at (801) 965-4753.

Date & Time	Location
Dec. 06 & 07, 2005	Embassy Suites Hotel Downtown SLC
Jan. 24 & 25, 2006	Embassy Suites Hotel Downtown SLC
Feb. 14 & 15, 2006	Embassy Suites Hotel Downtown SLC

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Check out ePM Help for additional MPS discussion (see pg. 2)



Understanding SPS, CPM and MPS

Seeing beyond the nomenclature

By Dan Avila and Elaine Fanning
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The Single Project Scheduler (SPS) determines the last day any given design activity may begin without exceeding the Project's target completion date. The total number of workdays needed to develop the Project is also determined. All Projects in ePM are processed through SPS using information entered on Screen 450, "Project Characteristics."

The project characteristics selected during project setup establish which activities are needed to complete the project. SPS uses them to calculate the number of work days and the number of hours required to complete each activity.

SPS generates the activities, the preliminary schedule and establishes the project's critical path based on the critical path method (CPM). CPM Identifies the path of the shortest duration through the activity network. Using this path, project work can be completed without violating the rules of activity precedence. In other words, SPS is CPM scheduling for a single project, assuming unlimited resources are available to develop the project; SPS determines the shortest possible time period required to develop a project from beginning to end based on activity standards.

Critical path is the succession of tasks that must be completed on schedule if the project is not to be delayed. Dependency and duration determine which tasks are on the Critical Path. In other words, if the SPS Early Start Date and the SPS Late Start Date are the same for any given activity, that activity is on the Critical Path.

The results SPS outputs are displayed on Screen 415 and include (see figure on right column)

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SPS Late Start Date: the last possible day work can begin on an activity so as to complete the Project by the Submit for Advertising Date.

Code	Name	Method of Calculation	Hours	Path	Days	SPS Early Start Date	SPS Late Start Date	Month
190	DEV RIGHT-OF-WAY PLANS	User Override	60	1	5	10/11/2005	12/13/2005	3209
730	REV SIGNAL LIGHTING PLANS	In Progress - Needs Update		4	4	10/11/2005	10/11/2005	
820	CUTIN FNL 404/5030 PERMIT	In Progress - Needs Update	0	30	30	10/11/2005	11/10/2005	3210
910	FNLZ LANDSCAPE MITIGAT PLAN	Planned	130	40	40	10/17/2005	10/17/2005	3210
940	CONDUCT DSR REVIEW	User Override	8	1	1	10/17/2005	12/12/2005	3206
10P	DEV FNL STRCT(MNR STRUCT)	In Progress - Needs Update	114	5	5	10/17/2005	12/07/2005	8261
20P	FINALIZE ROADWAY PLANS	User Override	100	5	5	10/17/2005	12/07/2005	3209
25P	FINALIZE LANDSCAPE PLANS	In Progress - Needs Update		2	2	12/14/2005	12/15/2005	3210
30P	FNLZ SIGNAL LIGHTING PLANS	User Override	80	1	1	10/17/2005	12/13/2005	3208
33P	REVIEW STRUCTURE PLANS	Planned	14	3	3	12/14/2005	12/14/2005	8261
35P	PREP PROSUTILITY AGREEMENTS	User Override	40	1	1	12/14/2005	01/03/2006	3211
37P	PREP SIGHT AGREEMENTS	Planned	61	4	4	12/14/2005	12/26/2005	3211
40P	CONDUCT FINAL RAY REVIEW	Planned	3	1	1	10/18/2005	12/20/2005	3209
45P	CONFORMITY REVIEW HWY PKG	Planned	0	2	2	10/19/2005	12/21/2005	3209
55P	MAKE RAY APPRAISALS	Planned	48	6	6	10/21/2005	12/23/2005	8223

Remaining CPM Dur: 88 SPS Completion Date: 01/18/2006 Float: -317
Next Run Date: 10/10/2005 Submit for Advertisement: 10/09/2004

SPS Completion Date: computed by adding the Remaining CPM Duration (based on last MPS run) plus the greatest of: Start Date First Activity or Next Run Date to determine the project's earliest completion date.

Submit for Advertisement: the estimated date all design work on PIN will be completed (calculated by SPS based on Screen 510; for more information on Screen 510 see the July 2005 issue of ePM News).

Float: the difference between the Submit for Advertisement Date and SPS Completion date, if any.

Single Project Scheduling outputs are required inputs for Multiple Project Scheduling (MPS). MPS is the algorithm used by ePM to perform resource-constrained scheduling. Outstanding work is scheduled within the constraint of available resources while considering all project development work to be completed. MPS uses the following criteria to schedule each activity:

- Determine the amount of available resources
- Prioritize the work that will be scheduled
- Assign the staff to complete the work
- Determine the Start Date for the activity and set aside the necessary resources

WHERE DO I FIND PREVIOUS ISSUES OF EPM NEWS?

Back issues of ePM News can be downloaded from the ePM webpage at <http://www.udot.utah.gov/index.php/m=c/tid=716> from the Downloads window (left side of the screen; it contains a complete listing of all newsletters published to date). Alternatively, users may follow the [ePM News](#) hyperlink under Article Listing at the bottom of the same webpage.